

REMARKS

In the Office Action, the Examiner has rejected claims 1-28 and 44-46. The claims have been amended to further clarify the subject matter regarded as the invention. Dependent apparatus claims 47-76 corresponding to the dependent method claims have been added. Claims 1-28 and 44-76 are now pending.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTION OF CLAIMS UNDER 35 USC §103

In the Office Action, the Examiner has rejected claims 1-27 and 44-46 under 35 USC §103 as being unpatentable over Warrier et al., U.S. Patent No. 6,707,809, ('Warrier' hereinafter) in view of Johansson et al, U.S. Patent Application Publication No. 2002/0080752, ('Johansson' hereinafter). This rejection is fully traversed below.

The claimed invention enables Mobile IP Home Agent clustering to be implemented. This is accomplished through intercepting and routing registration requests and replies via a main Home Agent that acts as a Home Agent cluster controller. In this manner, Mobile IP subscribers may be supported by multiple Home Agents, rather than a single, statically configured Home Agent. This may be desirable, for example, to perform load balancing.

For example, with respect to independent claim 1, a method of processing a registration request received from a Mobile Node is performed by a first one of a plurality of Home Agents. The first Home Agent receives a registration request addressed to a virtual Home Agent address associated with the plurality of Home Agents, and sends the registration request to a second one of the plurality of Home Agents. The first Home Agent creates a temporary binding between the Mobile Node and the Foreign Agent to which the Mobile Node has roamed. The temporary binding is updated to create a permanent binding when the registration reply is received from the second Home Agent.

It is important to note that Warriar fails to disclose or suggest “creating a temporary binding by the first one of the plurality of Home Agents between the Mobile Node and the Foreign Agent” or “updating the temporary binding by the first one of the plurality of Home Agents to create a permanent binding when the registration reply is received from the second one of the plurality of Home Agents.” In fact, steps 56 and 60 of col. 6 and step 64 of col. 6 are performed at two different entities. In no manner does Warriar disclose or suggest creating a temporary binding that is later updated. Rather, Warriar simply discloses creating a mobility binding record at two different entities, the Home Agent Control Node and the Home Agent. Accordingly, Applicant respectfully submits that the Examiner has failed to make out a prima facie case of obviousness.

Johansson fails to cure the deficiencies of the primary reference. In addition, the Examiner acknowledges that Magret is silent regarding “receiving the registration request addressed to a virtual Home Agent address.” While Johansson does disclose the use of a virtual home agent, the home agents are connected solely for redundancy purposes. Thus, data is transmitted by a primary to a backup home agent via the virtual router redundancy protocol (VRRP). In other words, the backup home agent is updated with registrations received by the primary home agent via the VRRP. See paragraph 0142. It would therefore be unnecessary for a Home Agent that is not processing registration requests to intercept registration requests. As such, Johansson teaches away from intercepting registration requests by a Home Agent that will not be servicing the request. Moreover, in view of the deficiencies of the primary reference, the combination of the cited references would fail to achieve the desired result.

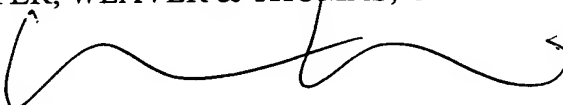
The dependent claims depend from one of the independent claims and are therefore patentable for at least the same reasons. However, the dependent claims recite additional limitations that further distinguish them from the cited references. The additional limitations recited in the independent claims or the dependent claims are not further discussed, as the above discussed limitations are clearly sufficient to distinguish the claimed invention from the cited references. Thus, it is respectfully requested that the Examiner withdraw the rejection of the claims under 35 USC §103(a).

SUMMARY

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 50-0388 (Order No. CISCP271).

Respectfully submitted,
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